

Claims

1. A method of providing signals for a synthetic voice by way of derived voice-representative data, in which the derived data is derived by combination of data representative of first and second voices, the combined data including selected parameters of a formant-type voice synthesiser.
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2. A method according to claim 1 in which the synthesiser is a synthesis-by-rule (SbR) system.
3. A method according to claim 1 in which each of the first and second stored data and the derived data includes a plurality of parameters.
- 10 4. A method according to claim 3 in which the combination includes interpolation or extrapolation of one or more parameters of the first and second stored data.
5. A method according to claim 4 in which various parameters are interpolated or extrapolated to different extents.
- 15 6. A method according to claim 4 in which a plurality of parameters are derived by interpolation or extrapolation of corresponding parameters of a plurality of voices, the ratio of interpolation or extrapolation being different for different parameters.
7. A method according to claim 4 in which the derived data includes a first parameter of value that corresponds to 100% of a first voice and 0% of a second voice, and a second parameter that corresponds to 75% of the first voice and 25% of the second voice.
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8. A method according to claim 4 in which the derived data includes a first parameter of value that corresponds to 75% of a first voice and 25% of a second voice, and a second parameter that corresponds to 50% of the first voice and 50% of the second voice.
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9. A method according to claim 4 in which the derived data includes parameters interpolated or extrapolated within an acceptable region of a parameter space.

10. A method according to claim 1 in which the parameters are control parameters of a formant synthesiser.
11. A method according to claim 1 on which the parameters are table values in a SbR synthesiser.
- 5 12. A method of generating a set of parameters as a voice characterisation for a formant-type voice synthesiser comprising generating a first set of parameters from a first voice model having first characteristics, generating a second set of parameters from a second voice model having second characteristics, and deriving a set of parameters by combining parameters generated by the first and
10 second (and optionally additional) voice models.
13. A method according to claim 12 in which combining the first and second voice models is achieved by interpolation or extrapolation.
14. A method according to claim 13 in which the contribution of each of the first and the second voice models to the combination is variable.
- 15 15. A method according to claim 12 in which the first and second models have characteristics that differ in respect of one or more of the following: gender of a speaker, accent of a speaker or age of a speaker, emotion of a speaker, rate of speaking and style of speaking.
16. A method according to claim 12 in which the first and second models originate
20 from different speakers.
17. A method according to claim 12 in which the first and second models originate from different speaking voices of one speaker.
18. A method according to claim 12 in which the voice synthesiser is a table-driven synthesiser, the parameter set being derived by combination of values obtained
25 from a plurality of parameter tables.
19. A method according to claim 12 in which the parameters are used to control the output of a signal generation stage of a speech synthesiser.

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20. A method according to claim 12 in which the parameters are generated periodically.
21. A method according to claim 20 in which the parameters are generated once in each of a succession of time frames.
- 5 22. A method of text-to-speech conversion including speech synthesis by a method according to claim 12.
23. A formant-based speech synthesiser operative according to a method of claim 12.
- 10 24. A formant-based speech synthesiser having an input stage, a parameter generation stage, and an output stage, the input stage receiving speech input instructions, the parameter generation stage generating parameters for reproduction by the output stage to generate speech signals, the parameter generation stage being provided with a characterisation table for characterising the output speech signals, wherein the synthesiser further comprises a table
- 15 derivation stage for deriving the characterisation table by combining data from a plurality of tables that each represent a particular voice.
25. A formant-based speech synthesiser according to claim 24 in which the table derivation stage is implemented as a component of a software system.